

DOCUMENT RESUME

ED 177 500

CS 005 050

AUTHOR Wilson, Robert D.
TITLE The Why of How to Teach Reading.
PUB DATE Jan 79
NOTE 10p.; Paper presented at the Annual Meeting of the Claremont Reading Conference 46th, Claremont, CA, January 19-20, 1979)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cognitive Processes; Communication (Thought Transfer); Cues; Elementary Education; Language; Language Patterns; *Language Processing; *Learning Processes; *Models; *Reading Instruction; *Reading Processes; Writer Language

ABSTRACT

A schema developed for the teaching of reading involves five factors: learning, language, clues, mediums of communication, and adaptive processes. Learning involves four tasks, taught in the following sequence: comprehension, comparison of semantic shapes, composition of the whole into parts, and concentration. There are four general language characteristics, which are the bases for the four learning tasks: semantics, shape, structure, and skill. Clues involve the spelling patterns of words, the configurations of the alphabet, lexical contexts, and the source of the message. The mediums of communication are sentences, paragraphs, content, and style, all of which may be taught by means of the four learning tasks. Finally, the adaptive processes are expecting, confirming, remembering, and organizing, which correspond respectively to forming, believing, holding, and integrating hypotheses and which are all involved in each of the four learning tasks. (The paper includes the schema for the teaching of reading, a chart that shows the interaction between the learning tasks and the mediums of communication, and a list of instructional strands that have been developed to incorporate the factors of the schema.)
(GT)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

The Why of How to Teach Reading

Robert D. Wilson

This paper is about the why. The how was demonstrated at the conference, with no discussion of such things as the reduction of anxiety (reaction to uncertainty), except that of learning (Piaget's disequilibrium (1)), the empirical method, the role of intuition, the teacher's presence, etc. The discussion will be on the learning tasks demonstrated. The how provides a bridge between language and reading. This how applies to both first-language would-be readers and to second-language would-be readers. The same pre-condition applies to both: "Does the learner know the language in which he is to read?" The why is a schema for the how: a model of factors. The factors are learning, language, clues, mediums of communication, and adaptive processes, which will be discussed in that order.

Learning

There are four learning tasks, and they are taught in the following sequence:

Comprehension — remembering the interpretation of the explicit message. Eventually, inference is taught for conscious contrast. The prime adaptive process is remembering.

Comparison — expecting the semantic shapes to be different. The prime adaptive process is remembering.

Composition — organizing the whole into parts (not from parts). The "whole" is a medium of communication: sentence, paragraph, content, style. The prime adaptive process is organizing.

Concentration — integrating the four adaptive processes intuitively — in this case, quickly (2). The prime adaptive process is confirming.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Robert D. Wilson

ED177500

C 50050 50

Language

There are four general characteristics that are universal for language, and they are the bases for the four learning tasks. See chart.

Semantics—the component of language that generates a communicative interpretation of form. Specifically, it interprets the deep structure of syntax, which includes entries from the lexicon, and the surface structure, which includes phonological form (3). This component is assumed to be able to generate interpretations of discourse, that is, of related sentences, as in paragraphs, in content areas, and in specific styles.

Shape—the tendency of language to have distinct semantic shapes, i.e., different shapes suggest different meanings. Ambiguity is a rare occurrence and turns out to be unambiguous in context almost always.

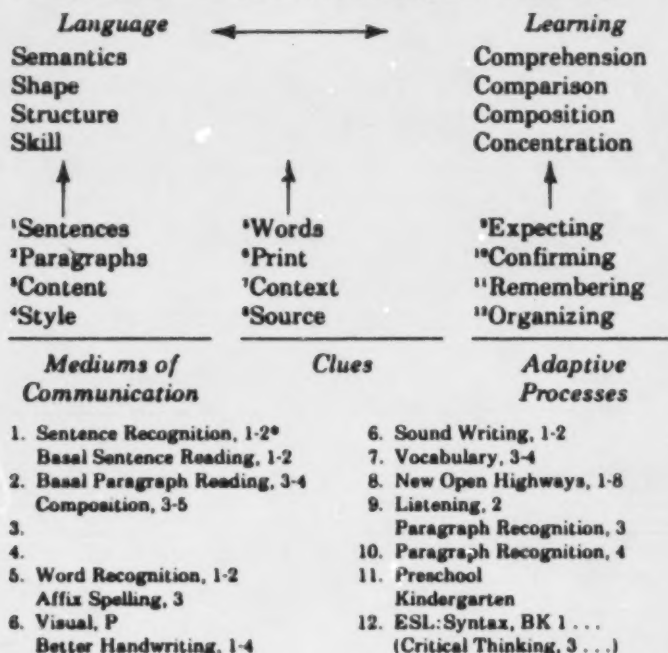
Structure—the relationship between a whole and its parts, a relationship characterized by transformation and self-regulation (4). Specifically for language, the connection between semantic interpretation on the one hand and its corresponding shape on the other is made by structure, e.g., by syntax for sentences.

Skill—the use of language accurately and quickly, purposefully and productively. It is skilled use that demonstrates the existence of a language.

Clues

Clues, because they are all that the reader gets for understanding the message the writer intended. And to understand is to invent (5, 6). It is decoding by encoding—not in its usual sense of letter-to-sound decoding of a word (7) but in the linguistic sense of getting the message (decoding) by giving the message (encoding) to oneself. The reader must have some clues for generating, inventing, encoding a communication that approximates what the writer intended. Without clues and without the attempt to approximate what the writer intended, one is either speaking or writing, not reading. To bring meaning to the printed page does not suggest a disregard for the text.

A Schema for the Teaching of Reading



*The numbers to the right of each strand indicate the suggested grade level.

On the other hand, much of what is being communicated is not on the printed page directly—for example, the meaning-bearing syntactic functions of a sentence. What are available are clues: words, print, context, and source. What is happening is a heuristic encoding, not an algorithmic decoding. See chart.

For clues to be processed efficiently into communication, one must become familiar with them and with each type involved. The processing must be efficient in order for the reader to more effectively organize the clues into messages. Familiarity comes with learning the structure of the clues: (a) the spelling patterns of words; (b) the geometric configurations of the alphabet; (c) the syntactic and

semantic expectations of words—Chomsky's feature matrices (8) for lexical contexts; (d) and the characterization of the source of the message, its author, the type of literature, the intention for reading it, the culture the language represents, the subculture (e.g., white middle class), etc.

Of the four, words are the most specific clues. As part of the syntactic component of a language, they contribute to the generation of the structure of sentences, albeit at the lowest level. Associated with each entry in the lexicon is a matrix of syntactic and semantic features which permit it to fit certain structural configurations and not others (8).

However, the meaning-bearing syntactic functions of a sentence operate at a level higher than the word. They must be invented by the reader; they are not directly derived, as by algorithm, from the words. For example, it is not so that a pronoun takes the place of a noun (a word replacing another word), but rather it replaces a noun phrase (one form replacing another form with the same function): "That boy from the Third Grade took the book" does not become "That *he* from the Third Grade took the book," but rather, "He took the book."

Another way in which words serve as clues is in their function as a system for codifying the culture, again albeit at the lowest level. They are clues to the culture, and the reader familiar with them as such can better discern the cultural implications of a text.

Sentences communicate. Words do not; they have meaning. And letters distinguish meaning. From the sentence to the letter are leaps and bounds from the concrete to the abstract. To teach for the mastery of letters and their "corresponding" sounds before sentences is to teach for the mastery of abstractions in order to learn the concrete. Furthermore, just as words do not constitute sentences structurally (except at the lowest level), letters do not constitute words structurally (except at the lowest level). There is a greater affinity (rules of expectations or predictive rules) between *t* and *r* in *truck* than between *r* and *u*, between *c* and *k* than between *u* and *c*, and between

uck and tr than between tru and ck. Generalizing u to a vowel, one sees how these spelling patterns apply to a host of words, e.g., train, trip, troll, trek / neck, pick, rock, sack. It is spelling patterns that constitute words structurally.

It is through the higher levels of structure that recall is facilitated, that such schemes better serve the processes of assimilation and accommodation (9, 10, 11).

Mediums of Communication

There are four general types for reading: sentence, paragraph, content, and style. See chart. By medium is meant a whole more meaningful than the sum of its parts. Familiarity with a medium facilitates reading, improving the reader's skill with practice. The whole or medium becomes more meaningful partly because it reveals or hints at the purpose of the writer to get a particular reaction from the reader. The medium improves comprehension by facilitating recall of the message rather than the mere association of words (sentence) or of the topic statement rather than the mere association of sentences (paragraph). The medium stretches comprehension by providing a semantic field for determining relevance and relatedness (content) or by providing an affective field by which the author is to some degree and in various aspects recognized (style).

Sentence—the basic unit of communication. It is shaped by words and punctuation and spaces, but it is constructed of syntactic phrases. The function of this order set of phrases is a message (12).

Paragraph—an ordered set of sentences. Its function is semantic unity, which is expressed by a topic statement either explicitly or implicitly. The ability to discern the topic statement is beyond the ordinary ability to understand the messages of sentences.

Content—an ordered set of general operations (ideas) internalized by the reader (Piaget's schemes and structures (13)) for determining relevance and relatedness of other

	<i>Sentence</i>	<i>Paragraph</i>	<i>Content</i>	<i>Style</i>
<i>Concentration</i>	This sentence says, "...." • Do as it says. • Answer this question, "....?" (explicitly answered by the sentence).	What questions will the next page answer? Read. Answer the questions. • Learner answers. • The story doesn't say, "... but I think that"	Write the topic statements of this first section of the story/article in sequence.	Paraphrase several (sets of) paragraphs from the beginning of the story/article.
<i>Composition</i>	• Which sentence says, "...?" • Which sentence answers the question, "...?" • Which sentence tells us that	Which paragraph answers the central question?	Which topic statements are (not) relevant to the author's purpose?	• Make up an imitation title for each of the model paragraphs above. • Make up an imitation topic statement for each of the model paragraphs above. • Both.
<i>Comparison</i>	Reach this phrase. Read the sentence. (Both tasks for the same student.) • What question does this phrase answer?	What other (supportive) questions does this paragraph answer? (Books closed, eventually)	• Summarize the first section of the story/article. • Organize the relevant topics into an outline.	Write a stylistically close imitation of one of the model paragraphs.
<i>Comprehension</i>	• Flash. What did that say? • The question is: "...?" Flash. Did that answer the question? (Continue till the question is answered.)	The question is: "...?" Read. (5 seconds) Close your book. Answer the question. Occasionally ask another question.	Read the rest of the story/article as fast as possible. (Measure: wpm) Followed by discussion with books closed.	Read the rest of the story/article as fast as possible. (Measure: wpm) Followed by discussion with books closed.

operations (ideas). It puts the reader on familiar terms with the ideas of a subject area.

Style—an unordered set of characteristics of the content, the conventions, and the connotations peculiar to an author, his personality, his discipline, his culture, his imagination, etc. There is no style independent of the work, and it may be said that the work is the style (14). Nevertheless, the style, or the work, puts the reader on familiar terms with the author. (Familiarity is relative, permitting one to identify the author of an unsigned piece, or confusing Chaucer with some of his imitators.) The reader's familiarity with the particular content and the particular style of the text facilitates his reading by providing a mind-set before the actual reading, by a lowering of anxiety (less disequilibrium), and by speedier processing.

All four mediums of communication may be taught by means of the four learning tasks of Comprehension, Comparison, Composition, and Concentration, in that order. See table.

Adaptive Processes

They are adaptive because they seem to be shared with animals. In human terms they involve hypotheses in the following ways:

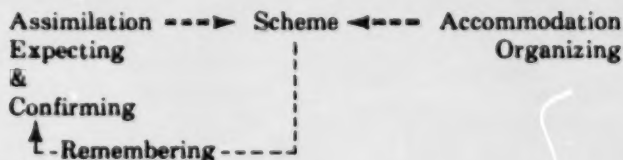
Expecting—Forming a hypothesis.

Confirming—Believing a hypothesis.

Remembering—Holding a hypothesis.

Organizing—Integrating a hypothesis.

These four processes correspond to (or are a paraphrase of, perhaps) the interacting of stimulus with response and response with stimulus of Jean Piaget (15):



All four adaptive processes participate in each of the four learning strategies for reading. See chart. One of the processes may be prominent (more conscious) than the others in a particular learning strategy:

Comprehension:	Remembering
Comparison:	Expecting
Composition:	Organizing
Concentration:	Confirming

Teaching Strands

I have been developing a curriculum which in part incorporates the factors of the schema presented here. The strands, each a sequence of lesson plans and materials, are listed at the bottom of the chart which appears earlier. These I have developed (except for two), with the help of teachers, for the San Ysidro School District. Many are updated versions of former work; some are new.

The strands on the mediums of communication (sentence and paragraph so far) make use of all four learning strategies. And so does *Word Recognition*. The others concentrate on one of the factors and make use of one or more of the learning strategies. For example, *Sound Writing*, a strand which reinforces the learning of the mechanics of writing with spelling patterns, makes use of comprehension, comparison, and composition. *Listening* and *Paragraph Recognition* focus on expecting and confirming while making use of concentration as the learning strategy.

REFERENCES

- 1 Piaget, Jean, *Six Psychological Studies* (Vintage Books, 1968), p. 156.
- 2 Perfetti, C. A., "Language Comprehension and Fast Decoding: Some Psycholinguistic Prerequisites for Skilled Reading," *Cognition, Curriculum, and Comprehension*, Guthrie, John T. (ed.), (IRA, 1977), p. 27.
- 3 Chomsky, Noam, *Studies on Semantics in Generative Grammar* (Mouton, 1972), pp. 82-119.
- 4 Piaget, Jean *Structuralism* (Basic Books, 1970), pp. 6-16.
- 5 Piaget, Jean, *To Understand is to Invent* (Viking Press, 1974), pp. 10-11.

- 6 Mattingly, Ignatius C., "Reading, the Linguistic Process, and Linguistic Awareness," *Language by Ear and Eye*, Kavanagh, James F. and Mattingly, Ignatius C. (eds.), (MIT Press, 1972), pp. 141-145.
- 7 Smith, Frank, *Psycholinguistics and Reading* (Holt, Rinehart, and Winston, 1973), chapter 6.
- 8 Chomsky, Noam, *Aspects of the Theory of Syntax* (MIT Press, 1965), pp. 75-122, 148-192.
- 9 Piaget, Jean, and Inhelder, Barbel, *The Psychology of the Child* (Basic Books, 1969), p. 5.
- 10 Vygotsky, L. S., *Thought and Language* (MIT Press and John Wiley & Sons, 1962), p. 109.
- 11 Athey, Irene, "Syntax, Semantics, and Reading," *Cognition, Curriculum, and Comprehension*, Guthrie, John T. (ed.), (IRA, 1977), p. 85.
- 12 Guthrie, John T., "Reading Comprehension Processes and Instruction," *Cognition, Curriculum, and Comprehension*, Guthrie, John T. (ed.), (IRA, 1977), p. 287-288.
- 13 Piaget, Jean, and Inhelder, Barbel, *The Psychology of the Child* (Basic Books, 1969), p. 4.
- 14 Gray, Bennison, *Style, the Problem and its Solution* (Mouton, 1969), pp. 68-73, 108-110.
- 15 Piaget, Jean, *Structuralism* (Basic Books, 1970), p. 71.